

XXI.—Description of a new Species of Ornithoptera, of the Priamus Group, in the Collection of the Hon. L. Walter Rothschild. By ROBERT H. F. RIPPON.

Ornithoptera eumæus, sp. n.

♂. Wings silky green-blue (nearly peacock-blue), especially the primaries, in some lights a blue-green; narrowly bordered with black. Primaries on the upper surface with a broad, costal, longitudinal, discal band of nearly uniform width extending from the base to within a few millimetres of the apex, slightly narrower at each extremity, strongly divided from the base by the costal and subcostal nervures, and again nearly midway by the subcostal nervure and its first branch nearest the costa; this band broadens slightly and irregularly where it meets the first or upper discocellular nervule; the sexual transverse velvety patch extends from the first median nervule to midway of the space bounded by the median and subcostal nervures, is not separated from the green-blue by black, and is of a rich dark fuscous; the median nervure nearly to the base strongly accentuated by green-blue atoms, its three branches and the third or lower discocellular nervule being also dusted in the same manner, the atoms of the first median branch extending into the coloured border; all the remaining nervures and their branches are indicated faintly by these atoms; a green-blue marginal band extends from the base of the posterior to four fifths of the exterior margin, narrowest at the base and towards the anterior angle, where it becomes divided by the marginal folds into two or three elegantly curved patches, decreasing in size towards the outer angle, following the outline of the margin of the wing; all the remainder of the wing a deep velvety blue-black.

Underside a rich black, becoming very tawny black towards the exterior margin, the neuration standing well in relief in either black or tawny black; within the discoidal cell an elongated patch of bluish green two thirds of its width near the discocellular nervules and very narrow at the base; a slight irregular margin of the same colour also at the upper part of the cell close upon the subcostal nervure; a few atoms also are so arranged as to suggest that the tendency was for the whole cell to be filled with green; without the cell the disk contains six green patches, widely separated by the nervules, and two costal patches, bounded by the third and fifth subcostal branches, the uppermost being the

largest, and each of them being rather a congeries of more or less densely sprinkled atoms than a continuous patch of green; the first four of these, starting from the posterior portion of the wing, are divided nearest to the outer margin by a more or less sublunate black spot; the fifth contains a triangulate, indented, and the sixth an elongate mark; all the green patches are well separated from the neuration by black and from the exterior margin of the wing by tawny black.

Secondaries: a silky green-blue extending over the wing till just within the second subcostal nervure, when the colour abruptly becomes a rich green, somewhat like that of *O. aruana* (Felder); this fills the remaining space of wing to the anterior margin, but is not found within the discoidal cell; the green and green-blue are delicately dusted and gradated by black atoms outwards from the base and downwards; three black submarginal ovoid spots, the first within the first and second subcostal nervules twice the length of the third and less distinct, being dusted with green atoms; the outer margin of the wing narrowly black, the median and subcostal nervure and first subcostal branch black and well-defined in the green; the space within the precostal nervure to the base brown-black. Underside rich golden-green, as in *aruana*; the space from the anal angle within the submedian nervure and third median nervule halfway up golden-yellow, base black; six large submarginal black spots, the upper one quadrate, the others more or less suboval; anterior margin partly filled with green, and space on each side of pre-costal nervure with green atoms; exterior black margin slightly broader than on the upperside, indented inwardly within the first and second subcostal and second subcostal and discoidal branches; the subcostal nervure and its first branch well defined by black.

Head.—Eyes pearly light brown, margined with white; space between deep black; antennæ light smoky brown.

Thorax.—Velvety black, with a very obtrusive longitudinal green-blue stripe; beneath lateral red patches and tawny black. Legs black.

Abdomen.—Golden yellow and ferruginous brown, the latter perhaps intensified by fading; anal segment with the usual trisinate black mark and a minute tawny curved spot on each valve divested of scales; lateral black dots six in number.

Length of costa 80 millim.; antennæ and abdomen each 33 millim.; head and thorax about 20 or 22 millim.

Hab. Aru Islands.

On the underside this form does not present any features sufficiently distinct to distinguish it from *aruana*; the upper surfaces, however, are remarkably different in colour from that species, though the arrangement of the markings is nearly the same. The rich golden-green of *aruana* is replaced in this species by the brilliant green-blue, and the singular patch of vegetable- or *aruana*-green on the posterior wing, as described above. By contrast with the green-blue this colour seems most like that of *pegasus* (Felder), while the gradations of colour and opalescent tints in certain lights link it with *Urvilliana* and *cræsus* on the one hand and *priamus* and *pronomus* on the other. Possibly it is only a remarkable transitional variety of *aruana*, but at present it is sufficiently distinct to merit a distinguishing name; and it goes far towards enabling us to link together the whole of the members of the *priamus*-group and regard them as local forms of the typical species *priamus*.

♀. Wings on both surfaces tawny brown, richer on the underside. Primaries with a subquadrate oblique patch within the discoidal cell sordid white, the *pseudoneura* quite visible; without the cell are eight elongate separated marks of the same colour, the first within the third and fourth subcostal branches ill-defined in outline, short and acuminate, the second shorter and broader, the third a long hastate mark filling one half the space between the nervules and containing a cuneiform spot; the fourth is shorter, with a larger cuneiform spot; the fifth consists of three white spots of different forms, widely separated by the brown; the sixth is divided into two of unequal size; the seventh is divided into a long hastate and an irregular-shaped small mark; the eighth is twin-spotted, with a faint spot higher up; the exterior margin with small whitish scalloped spots. The sordid colour is caused by the white being all covered with grey scales. Secondaries with the submarginal band white and very broad, occupying the greater part of the disk between the nervules; four divisions, or those bounded by the second subcostal and the third median branches, containing midway a moderately-sized orbicular tawny brown spot, the upper one being the largest; each of these divisions is sinuate at the outer end, the indentations being most numerous in the upper two, and all are pointed or acuminate at the ends nearest the cell. Between the first and second subcostal nervules is a separated sinuate spot or a portion of the white band cut off by the brown of the wing; below the black orbicular spots the white becomes more tawny, and between each of the divisions are indications in

ochre of the trigonal yellow marks of the underside; the lunations of the outer margin tawny yellow-white.

The undersides of the primaries differ little from the upper; the same may be said for the secondaries, except that between the costal nervure and the first subcostal branch is a small dark yellow irregular-shaped spot; a small orbicular black spot in the white between the submedian nervure and the third median branch, and the white beneath all the black orbicular spots contains a yellow acuminate mark filling most of the space from the spot to the sinuate border, the lunations of the exterior margin being also yellow; neuration well defined above the black.

Head.—Eyes dark brown, margined with tawny white.

Thorax.—Above tawny brown, with a narrow green-ochreous longitudinal stripe; beneath, lateral crimson-scarlet spots occupying much of the space above and on each side of the legs, the remainder tawny brown.

Abdomen.—Above greenish-ochreous white; subdorsal brownish ochreous-yellow, with strong black articulations and five lateral black dots.

Length of costa 102 millim.; antennæ and abdomen each 37 millim.; head and thorax 25 millim.

From the foregoing it would appear that the pattern is of the same type and well within the limits of the variations in the species *aruana*; and this insect might well be taken as a female var. of that species. In the case of the male it would be impossible to make a mistake.

Hab. Aru Islands.

This species will be fully figured in the fifth part of the author's 'Icones Ornithopterorum.'

MISCELLANEOUS.

Diagnosis of a new Mexican Geomys. By OLDFIELD THOMAS.

Geomys Bulleri, sp. n.

Apparently allied to *G. castanops*, LeC., but smaller, with a naked tail, and with the face more slaty than the body instead of more chestnut, and with white hairs bordering the naked nasal pad.

Dimensions of type (♀ in spirit):—Head and body 135 millim., tail 63, fore foot and claws 27·5; hind foot 25·5, with claw 27·6. Skull of a second specimen (♂), basal length 33·4.

Hab. Talpa, Mascota, Jalisco, 8500 feet (*Dr. A. C. Buller*).